The nature, cause and consequence of COVID-19 panic among social media users in India (Supplementary Details)

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Statistical Analysis

The distribution of different social media usage intervals were derived before lockdown (see Table S1) and during the lockdown (see Table S2) for the respondents across the world. They were also grouped into India and other countries. We performed McNemar Bowker test for the paired variable measurements (intervals) of daily social media usage before and during lockdown. This showed statistically significant differences for all groups (see Table S3).

Daily Usage	Frequency	Percentage	Cumulative Percentage
$<$ 1 hr	299	27.81	27.81
1-2 hrs	438	40.74	68.56
2-3 hrs	194	18.05	86.60
3+ hrs	144	13.40	100.00
Total	1075	100.00	–

Table S1 Daily involvement in social media before the lockdown. Social media usage by the respondents across the world per day before the lockdown (or other types of containment) due to COVID-19.

Daily Usage	Frequency	Percentage	Cumulative Percentage
$<$ 1 hr	178	16.56	16.56
1-2 hrs	265	24.65	41.21
2-3 hrs	265	24.65	65.86
3+ hrs	367	34.14	100.00
Total	1075	100.00	–

Table S2 Daily involvement in social media during the lockdown. Social media usage by the respondents across the world per day during the lockdown (or other types of containment) due to COVID-19.

Group	Size	χ^2 value	p value
All	1075	355.21	< 0.001
India	935	301.68	< 0.001
Other Countries	140	55.85	< 0.001

Table S3 McNemar Bowker test on the change of social media usage. The increase of social media usage during the lockdown is significant for all the groups.

The panic level variable was not found to be normally distributed in groups (India and other countries). We applied the Kolmogorov-Smirnov test (and not the Shapiro-Wilk Test) for normalcy testing because the sample size is no less than 50. The normality test results are reported in Table S4. Due to this reason, this variable was evaluated using the nonparametric Wilcoxon Mann Whitney test. We observed that the panic levels do not significantly differ between the respondents across all the countries ($n = 1075$, $\mu = 2.47$, $\sigma = 1.42$), in India ($n = 935$, $\mu = 2.48$, $\sigma = 1.43$), and in other countries except India ($n = 140$, $\mu = 2.43$, $\sigma = 1.36$).

Group	Size	Kolmogorov-Smirnov Test	
		Statistic	p value
India	935	0.180	< 0.001
Other Countries	140	0.145	< 0.001

Table S4 Normality test on the panic level. The panic levels in India and other countries do not follow a normal distribution.

For association studies, we performed Chi-Square tests because the pairs of variables considered are selected from the same population. A Chi-Square test helps to determine whether two categorical variables have a significant correlation between them.

We noticed that 71.72% people preferred to send only younger people out for shopping, 0.46% people preferred to send only older people out for shopping, and the rest 27.81% people had no specific change of the current plan (anyone can go to shopping). We found a significant association of these decisions with the panic level. We observed that the people preferring to send only younger people out for shopping were more panicked ($\mu = 2.56$, $\sigma = 1.40$) as compared to those who are not changing their shopping plan ($\mu = 2.24$, $\sigma = 1.45$).

Analysis on Respondents from India

We observed no correlation between the panic level and the time to get the COVID-19 vaccine in India (see Fig. S1).

We performed association study to understand the mental preparedness of people regarding the availability of vaccine for COVID-19. To understand whether the expected time to get COVID-19 vaccine is different across the age groups and professions of respondents, we used Alluvial diagram for highlighting their associations. Fig. S2 highlights no association between the said time and the demographic factors considered in India.

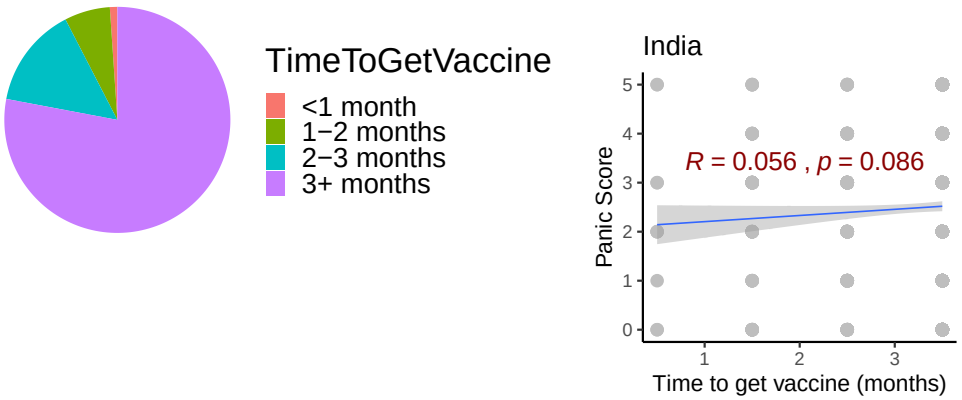

Figure S1. Effect of time to get vaccine on the panic level in India. Correlations between the panic level and the time expected by the respondents to get COVID-19 vaccine.

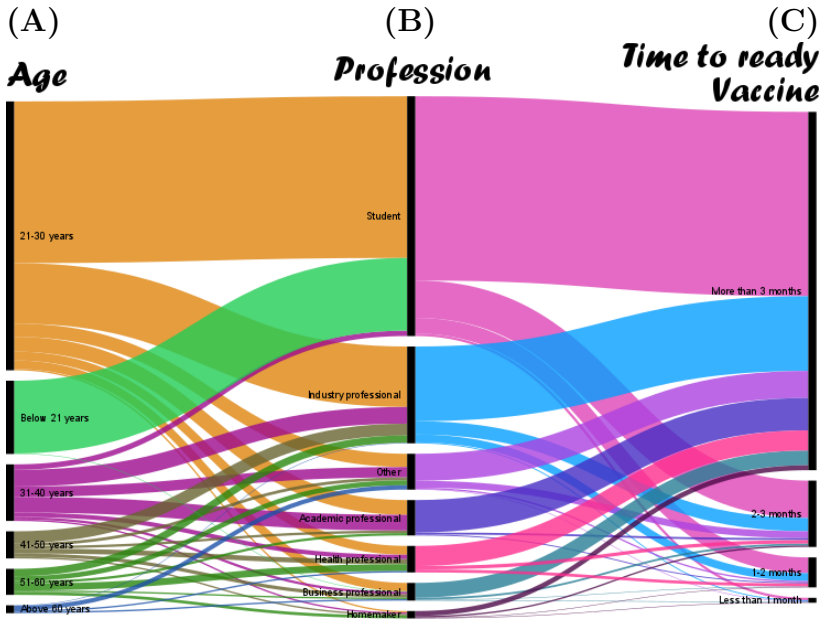

Figure S2. Mental preparedness regarding the availability of COVID-19 vaccine across different age groups and profession in India. Associations between the (A) age group or (C) profession of people in India and (C) the time expected by them to get the vaccine for COVID-19 ready.

Analysis on the Respondents from Other Countries Except India

A significant increase of social media usage (Wilcoxon-Mann-Whitney, $p = 3.02\text{e-}14$) is also observed in the other countries during lockdown (see Fig. S3(A)). The mean social media usage has become 2.33 hrs over 1.73 hrs per day in other countries. On grouping the respondents from India into equal sized cohorts based on the temporal order of their participation in the survey, we observed no significant increase of panic over time (see Fig. S3(C)). There is a moderate but significant dependence of panic level on the social media usage before and during the lockdown in other countries (see Fig. S3(D)-(E)). However, the panic level has no association with the rise of social media usage in other countries. We noticed that the level of panic is independent of the association of a person (as a Government personnel, health professional or researcher) with COVID-19 in other countries (see Fig. S3(F)). Moreover, the panic level is also independent of the rise of social media usage in other countries (see Fig. S3(G)).

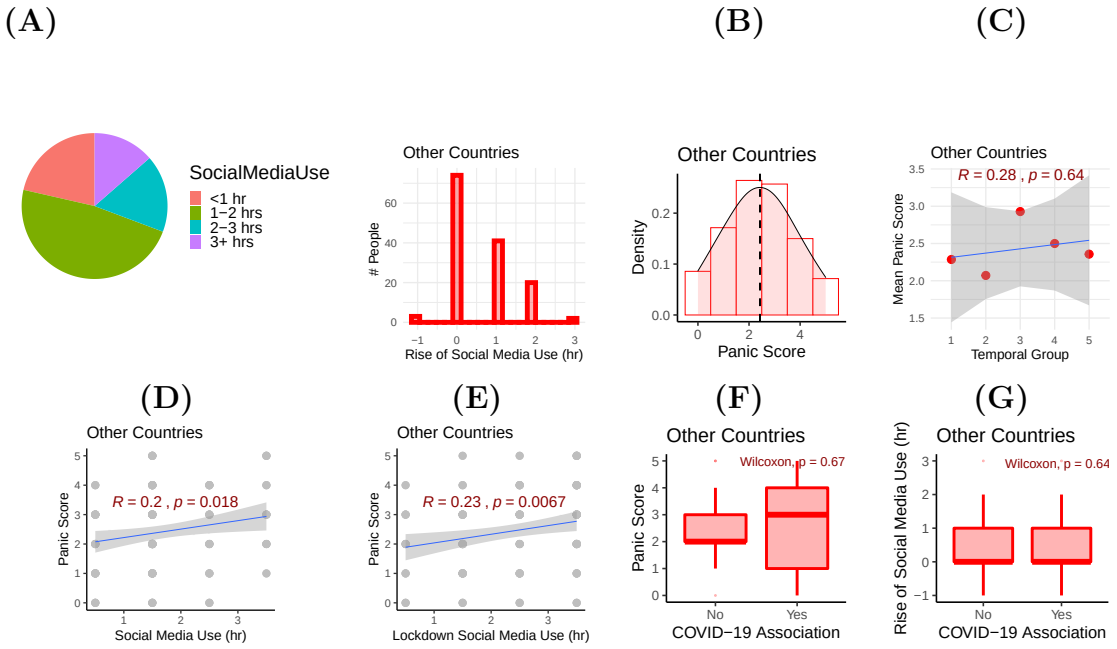

Figure S3. Effect of social media usage and COVID-19 association on the panic level in other countries except India. (A) The rise of social media usage during the lockdown. (B) Density of panic levels. (C) Mean panic level of people temporally grouped by the order of their participation in the survey. Correlations between the panic level and hourly usage of social media per day (D) before the lockdown and (E) during the lockdown. (F) Association with COVID-19 and its effect on the panic level. (G) Association with COVID-19 and its effect on the rise of social media usage during the lockdown.

We examined the level of panic against the demographic details of the respondents to understand the differentiating factors of panic in other countries. The violin plots in Fig. S4 highlight the sample distributions of panic score over different subgroups of demographic

factors (among respondents from other countries except India) along with a non-parametric test result to verify whether they originate from the same distribution. We observed no significant difference of mean panic level of the people across different age groups. We found that females express a significantly higher level of panic than males in other countries (Wilcoxon-Mann-Whitney, $p = 0.05$). The level of panic is independent of the nature of COVID-19 association, education, location type or profession of the respondents in other countries.

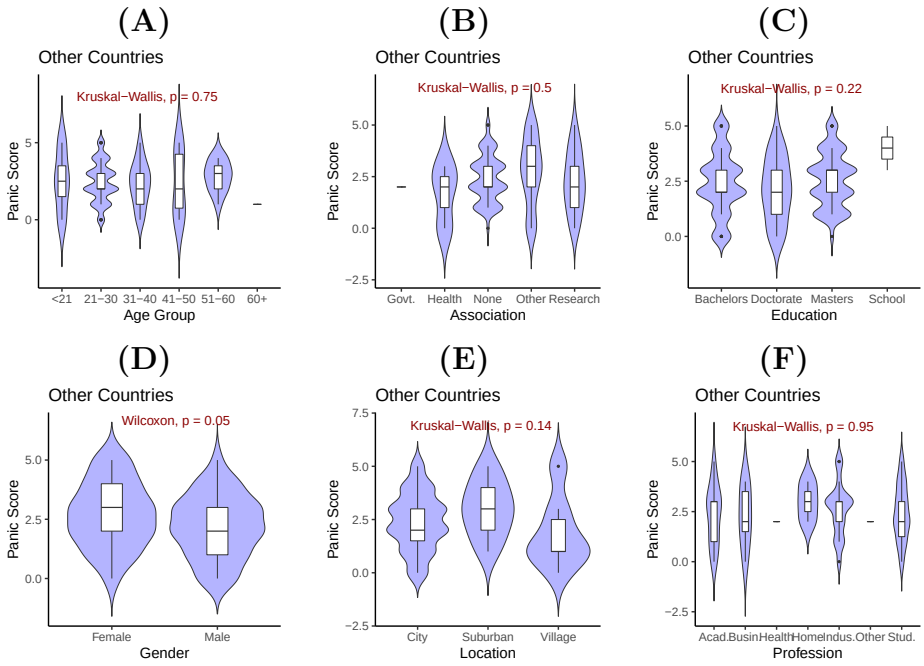

Figure S4. Panic level in other countries except India against different demographic factors. Violin plot showing the level of panic among different sets of people specific to their (A) age group has no significant difference, (B) association with COVID-19 has no significant difference, (C) level of education has no significant difference, (D) gender has significant difference, (E) location type has no significant difference, and (F) profession has no significant difference.

We observed no significant association between the understanding about COVID-19 and the profession of a person in India. In fact, the responses against the questions like what COVID-19 actually means (see Fig. S5(A)) or whether pneumonia vaccine can help prevent COVID-19 (see Fig. S5(B)) are not related to the profession for the people residing in the other countries.

We studied the actions people to take after returning from grocery, when a neighbor is tested COVID-19 positive, and when someone they know is tested COVID-19 positive. We observed no significant association (Chi-Square, $\chi^2 = 81.66$, $p = 0.3664$, Chi-Square, $\chi^2 = 84.99$, $p = 0.1405$, and Chi-Square, $\chi^2 = 81.66$, $p = 0.3664$, respectively) between the said preventive activities undertaken by the respondents in other countries and their profession.

We observed a highly significant association ($\chi^2 = 32.44$, $p = 3.38\text{e-}04$) between the mental health and panic level in other countries (see Fig. S6(A)). We noticed a significant

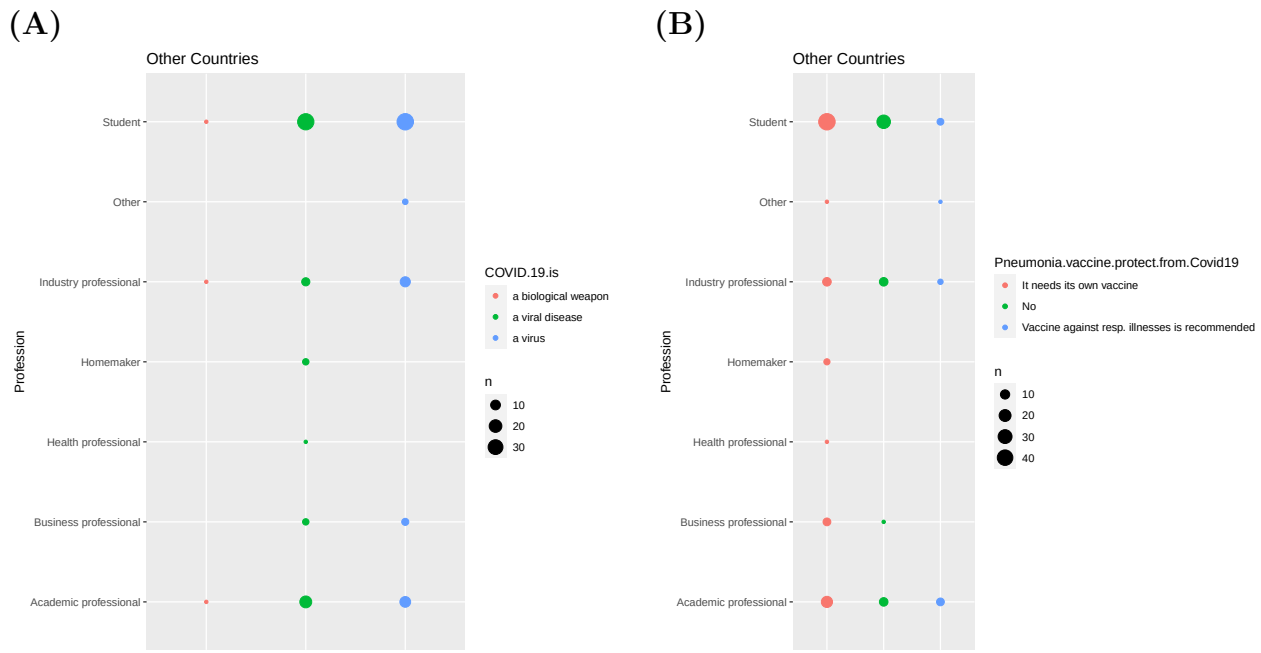

Figure S5. Association between the knowledge about COVID-19 and profession of the respondents in other countries except India. (A) Basic knowledge about COVID-19 is independent of profession. (B) Basic knowledge about the treatment of COVID-19 is independent of profession.

association ($\chi^2 = 10.65$, $p = 0.03$) between the mental health and productivity in other countries (see Fig. S6(B)). We found no significant connection ($\chi^2 = 7.8439$, $p = 0.0975$) between the mental health and level of tension felt after reading a post related to COVID-19 on social media in other countries (see Fig. S6(C)). Similarly, no significant dependence is observed ($\chi^2 = 23.189$, $p = 0.2796$) between the method perceived by people to reduce panic level with their COVID-19 association in other countries (see Fig. S6(D)).

A slightly negative correlation is observed between the panic level and the time to get the COVID-19 vaccine for other countries but it was not significant (see Fig. S7). The distribution of time to get the COVID-19 vaccine highlighted that the respondents in India are slightly more impatient in comparison with the other countries but this observation is not significant.

We performed association study to understand the mental preparedness of people regarding the availability of vaccine for COVID-19. To understand whether the expected time to get COVID-19 vaccine is different across the age groups and professions of respondents, we used Alluvial diagram for highlighting their associations. Fig. S
refFig:AlluvialVaccineOther highlights no association between the said time and the demographic factors considered in other countries except India.

The different dimensions of precautionary thoughts of people from other countries are highlighted in Fig. S9. We observed that most (61%) of the people in other countries were conditionally interested in a free test likewise India. However, we noticed that a comparatively smaller fraction (29%) of people were not ready to take precautions like air borne

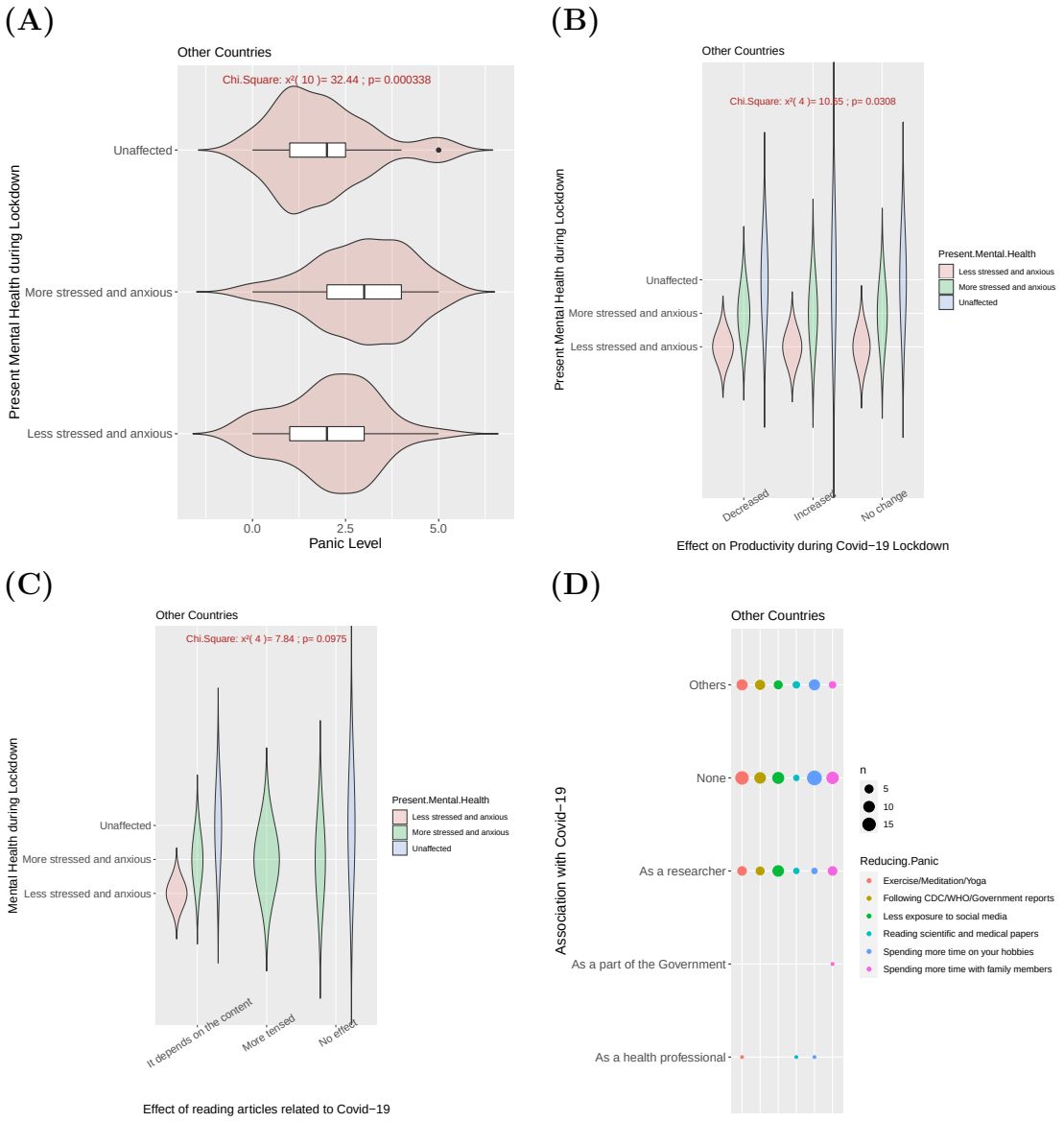

Figure S6. Association between mental health and other factors in other countries except India. (A) Violin plot depicting panic Level and its relation with mental health. (B) Violin plot depicting effect on productivity with respect to mental health, (C) Violin plot representing how much the tension felt after reading articles on COVID-19 affect mental health, (D) Ways to reduce panic as perceived by people associated to COVID-19 through various conditions.

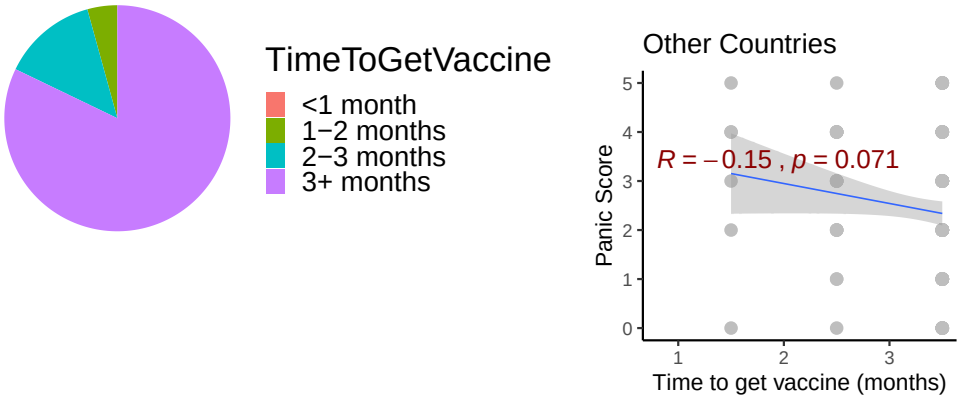

Figure S7. Effect of time to get vaccine on the panic level in other countries except India. Correlations between the panic level and the time expected by the respondents to get COVID-19 vaccine.

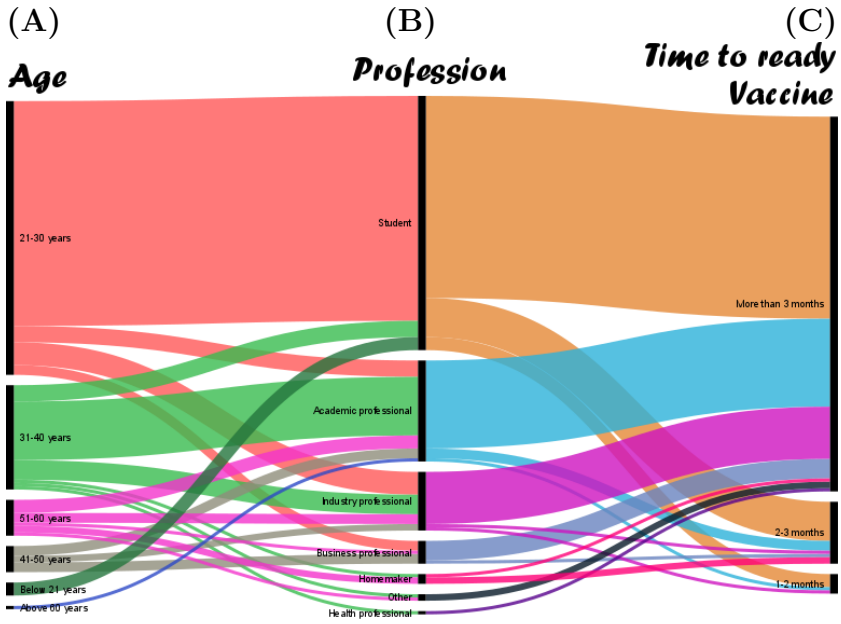

Figure S8. Mental preparedness regarding the availability of COVID-19 vaccine across different age groups and profession in other countries except India. Associations between the (A) age group or (C) profession of people in India and (C) the time expected by them to get the vaccine for COVID-19 ready.

diseases. On the other side, we noted that a large fraction (29%) of people expected SARS-CoV-2 to survive on arbitrary surfaces for more than a week in other countries.

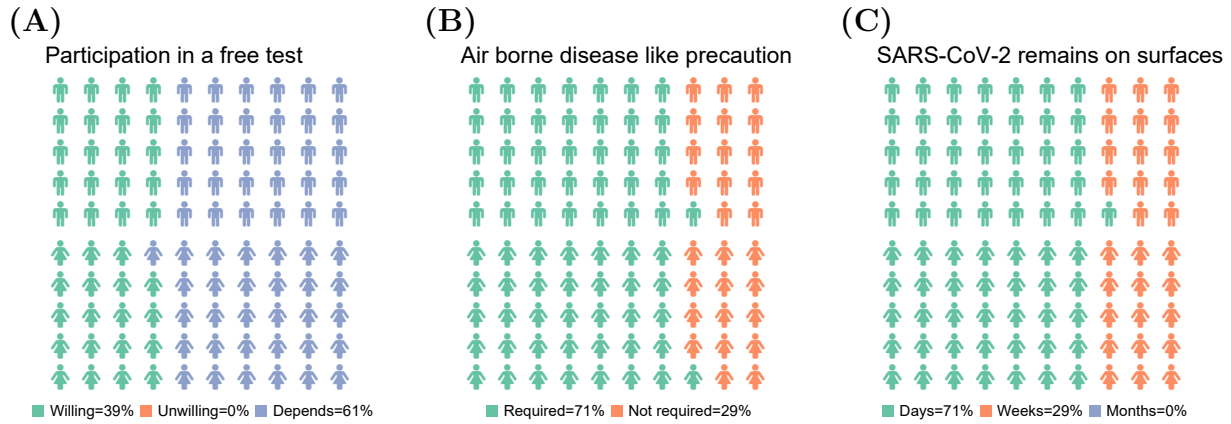

Figure S9. Gender-specific cautiousness about COVID-19 of the respondents in other countries except India. (A) Waffle plot depicting willingness to participate in free test offered by the Government for COVID-19. The conditional willingness depends on either having relevant symptoms or physical contact with someone infected. (B) Waffle plot depicting whether precautions are taken like air borne diseases. (C) Waffle plot depicting perception about survival of SARS-CoV-2, the virus responsible for COVID-19, on any arbitrary surfaces.

Hashtag Analysis

We selected the top relevant hashtags appearing in India since the COVID-19 outbreak. Some of these were also top hashtags around the world. The details of these hashtags are shown in Table S5. As can be seen from Table S5, although some of the top hashtags were initially used in erroneous forms but have been gradually corrected over time. However, such corrections often take time.

Sentiment Analysis

The sentiment analysis results for Indian respondents with respect to different age groups are reported in Table S6 and Table S7. The sentiment analysis results for Indian respondents with respect to different genders (female and male) are reported in Table S8 and Table S9. The sentiment analysis results for Indian respondents with respect to different education levels (School, Bachelors, Masters, Doctorate) are reported in Table S10 and Table S11.

Qualitative Analysis

We brought together various experiences of people during lockdown or other types of containment (because there was no lockdown in some countries like South Korea) into different

Hashtag	India		Worldwide		#Locations
	Last Seen	Best Rank	Last Seen	Best Rank	
#Corona	Mar 11, 2020	43	Mar 11, 2020	1	33
#CoronaStopKaroNa	Mar 23, 2020	2	Mar 20, 2020	18	7
#GoCorona	Apr 05, 2020	5	-	-	1
#chinesevirus	Mar 20, 2020	4	Mar 17, 2020	27	33
#ChineseVirusCorona	Mar 27, 2020	3	-	-	4
#ChineseVirus19	Mar 29, 2020	1	Mar 26, 2020	7	17
#ChineseVirusCovid19	Mar 29, 2020	49	-	-	1
#COVID19	Mar 12, 2020	18	-	-	59
#covid	Apr 01, 2020	28	-	-	34
#COVID_19	May 10, 2020	2	Mar 13, 2020	1	60
#COVID–19	May 14, 2020	2	Mar 15, 2020	1	61
#SocialDistance	Mar 15, 2020	46	Mar 15, 2020	43	15
#SocialDistancingNow	Mar 16, 2020	21	-	-	13
#SocialDistancing	Mar 22, 2020	18	-	-	37
#quarantine	Mar 20, 2020	31	-	-	32
#QuarantineLife	Mar 28, 2020	27	Mar 17, 2020	3	51
#StayHomeStaySafe	Mar 27, 2020	2	Mar 21, 2020	22	23
#StayHomeStayLives	Apr 20, 2020	31	-	-	1
#Lockdown	Apr 01, 2020	14	Mar 12, 2020	25	40
#lockdowneffect	Apr 08, 2020	3	Apr 06, 2020	6	26
#Lockdownextension	May 12, 2020	1	Apr 09, 2020	14	13
#lockdownextension	May 17, 2020	1	May 06, 2020	4	19
#LockdownExtended	May 17, 2020	1	May 17, 2020	2	19
#Azithromycin	Mar 21, 2020	37	-	-	1
#Hydroxycloroquine	Apr 07, 2020	5	-	-	3
#hydroxychloriquine	Apr 08, 2020	2			6
#hydroxychloroquine	Apr 10, 2020	18	-	-	7
#remdesivir	Apr 30, 2020	15	-	-	13
#dettol	Apr 15, 2020	20	-	-	3

Table S5 Top COVID-19 hashtags on Twitter. Twitter hashtags associated with COVID-19 that appeared at least once in the top 50 list in India since the COVID-19 outbreak. The number of locations denote the count of countries in which the hashtag appeared in the top 50 list at least once. Hashtags are grouped by content and ordered chronologically in a group based on their last appearance in the top 50 list. Best ranks are not necessarily obtained when they were last seen. Hashtags that are misspelled or written in local language are highlighted in red.

	<21 yrs	21-30 yrs	31-40 yrs	41-50 yrs	51-60 yrs	60+ yrs
Top Contexts – Complex	spending time (96%, 2), video call (95%, 2)	spending time (98%, 17), family time (98%, 14), online courses (98%, 10), quality time (97%, 9), story books (97%, 5), online classes (97%, 4), spending quality time (97%, 3), technical skills (96%, 3), web series (96%, 3), household work (96%, 3), online teaching (96%, 2) spent time (95%, 2) playing games (95%, 2), certification courses (95%, 2), posting videos (95%, 2), watching movies (94%, 2), culinary skills (94%, 2), skill-set (94%, 2) household chores (94%, 2), outside food (93%, 2)	spending time (97%, 6), quality time (96%, 3), family time (95%, 2)	spending time (97%, 6), family time (95%, 2)	family time (97%, 3), spending time (95%, 3)	
Top Contexts – Simple	cooking (100%, 22), family (96%, 8), skills (93%, 6), drawing (91%, 3), coding (89%, 4), spending (87%, 4), book (85%, 5), parents (83%, 3), Programming (81%, 4), learning (78%, 2), education (76%, 2), movie (75%, 4), sleeping (73%, 3), video (72%, 3)	cooking (100%, 112), family (98%, 62), spending (97%, 24), skill (96%, 27), online (95%, 21), movies (95%, 11), book (94%, 23), technology (93%, 5), Learning (92%, 9) Food (92%, 9), language (91%, 9), drawing (90%, 8), courses (89%, 16), reading (89%, 7), quality (88%, 11)	family (100%, 17), cooking (96%, 11), technology (92%, 3), spending (89%, 9), analysis (86%, 2), exercise (84%, 3), Home (81%, 5), quality (79%, 4), Work (77%, 5), pollution (75%, 2), Sleep (73%, 2), hobbies (71%, 2), Book (69%, 4), kid (67%, 4), patience (66%, 3)	family (100%, 15), spending (92%, 9), books (87%, 4), home (82%, 5), research (78%, 2), cooking (75%, 3), household (71%, 4), phone (68%, 2), skills (65%, 2), work (62%, 3), gardening (59%, 2), Dependency (56%, 2), wife (54%, 2)	family (100%, 6), work (94%, 5), Reading (89%, 2), singing (85%, 2), movies (81%, 2), household (77%, 4), spending (73%, 3), cooking (69%, 3), spouse (63%, 2), house (61%, 2), book (59%, 2)	-
Top Entities	Borough of Reading (66%, 3)	Netflix (35%, 2),Borough of Reading (79%, 17)	Netflix (35%, 1), Borough of Reading (75%, 6)	Borough of Reading (89%, 6)	Borough of Reading (78%, 3)	Borough of Reading (93%, 4)
Top Topics	Music (99.644), Literature (70), School (70), Test/examination (70), Hobby (70), DIY (70)	Cinema (99.644), Music(99.644), School (99.644), Design and Engineering (97.2924), Family (92.5298), Television (89.3879)	Family (91.8683), Children (74.1222), Wireless Technology (70), Losses (70), School (70), Environmental Pollution (70), People (70), Hobby (70), Gardening (70)	Family (93.9942), Music (70), Gardening (70)	Family (92.1627)	-
Sentiment Type	Positive (26%), Negative (14)%, Neutral (60%)	Positive (24%), Negative (18)%, Neutral (58%)	Positive (28%), Negative (11)%, Neutral (61%)	Positive (27%), Negative (13)%, Neutral (60%)	Positive (18%), Negative (20)%, Neutral (62%)	Neutral (100%)
Sentiment Value	52.1	20	88.1	99.9	-100.0	100.0
Comment Type	Opinion (77%), Fact (23%)	Opinion (80%), Fact (20%)	Opinion (78%), Fact (22%)	Opinion (82%), Fact (18%)	Opinion (81%), Fact (19%)	Opinion (82%), Fact (18%)

Table S6 Sentiment analysis of the best experiences during lockdown across different age groups. Sentiment analysis of the best experiences faced by the respondents in India across different age groups during the lockdown period.

	<21 yrs	21-30 yrs	31-40 yrs	41-50 yrs	51-60 yrs	60+ yrs
Top Contexts – Complex		meeting friends (97%, 4) physical activity (97%, 4) mental stress (96%, 3) social life (96%, 3) family members (96%,3)			social distancing (96%,2)	
Top Contexts – Simple		work (100%, 30), food (99%, 13), home (98%, 21), friends (97%, 24), boredom (96%, 14), fear (95%, 13), job (95%, 21), family (94%, 12), research (93%, 9), college (92%, 18), physical (92%, 7), lack (91%, 13), mental (90%, 10), uncertainty (90%, 7), anxiety (89%)			home (100%, 5) feeling (95%, 4) uncertainty(91%, 3) family (87%, 3) loss (83%, 4) phone (79%, 2) boredom (76%, 2) social (73%, 3) distancing (70%, 2) interest (67%, 2) wage (65%,2) chamber (62%, 2) chores (60%, 2) work (58%, 2) job (56%, 2)	
Top Entities		Himalays			King	
Top Topics	Family (92.2578), School (70), Psychology (70)	Recreational and sports goods (99.9625), school(99.664), Losses(99.664)	Losses(70), Job Layoffs(70), Poverty (70), Senior Citizens (70)	Parent And Child (92.5426), Losses (70), Job Layoffs (70)	Children (81.2291), Losses (70), People (70), Job Layoffs (70)	
Sentiment Type	Positive (%), Negative (%), Neutral (%)	Positive (%):7, Negative (%):35, Neutral (%):58	Positive (%), Negative (%), Neutral (%)	Positive (%), Negative (%), Neutral (%)	Positive (7%), Negative (34%), Neutral (59%)	
Sentiment Value	13.8	23.3			-14.2	
Comments	Opinion (%), Fact (%)	Opinion (%):79, Fact (%):21	Opinion (%), Fact (%)	Opinion (%), Fact (%)	Opinion (76%), Fact (24%)	

Table S7 Sentiment analysis of the worst experiences during lockdown across different age groups. Sentiment analysis of the worst experiences faced by the respondents in India across different age groups during the lockdown period.

	Female	Male
Top Contexts – Simple	cooking (100%, 80), family (98%, 44), spending (96%, 24), books (95%, 18), drawing (93%, 9), language (92%, 7), reading (91%, 6), home (90%, 10), online (89%, 10), food (88%, 6), meditation (87%, 6), movies (86%, 6), quality (85%, 9), parents(84%,7), skills(83%,7)	Family (100%,70), cooking (98%,79), spending (97%, 31), skill (96%, 30), exercise (96%, 9), technology (95%, 6), book (94%, 24), work (93%, 21), learning (93%,8), online (92%,14), analysis (91%,3), home (90%, 12), household (90%,15), course(89%,15), pollution (88%, 7)
Top Entities	Borough of reading	Borough of reading, Netflix
Top Topics	Family (99.9235), Music (99.644), Children (82.76)	Cinema (99.644), Music (99.644), School (99.644), Technology (general) (99.644), Parent And Child (98.6572), Design And Engineering (97.4647), Family (92.7972), Television (90.042)
Sentiment Type	Positive (%)22 Negative (%)14 Neutral (%)64	Positive (%) 29 Negative (%) 14 Neutral (%) 57
Sentiment Value	-18.4	-6.6
Comments	Opinion (%)78 Facts (%)22	Opinion (%) 80 Facts (%) 20

Table S8 Sentiment analysis of the best experiences during lockdown across different genders. Sentiment analysis of the best experiences faced by the respondents in India across different genders during the lockdown period.

	Female	Male
Top Contexts – Complex	family members (97%, 4), worst thing (97%, 3), health conditions (96%, 2), worst things (96%, 2), lost job (95%, 2), household chores (95%, 2), weight gain (95%, 2)	family time (98%, 14), quality time (97%, 6), online classes (97%, 4), online courses (96%, 3), story books (96%, 3), staying home (96%, 2), air quality (95%, 2), household work (95%, 2), classical dance (95%, 2)
Top Contexts – Simple	family (100%, 12), boredom (98%, 8), study (97%, 13), food (96%, 6), home (95%, 9), fear (94%, 7), work (93%, 11), loneliness (92%, 5), physical (91%, 4), anxiety (90%, 6), job (89%, 9), college (88%, 8), loss (87%, 8), feeling (86%, 6), uncertainty (85%, 4)	Cooking (100%, 80), family (98%, 44), spending (96%, 24), books (95%, 18), drawing (93%, 9), language (92%, 7), reading (91%, 6)
Top Entities	Himalayas	Reading
Top Topics	Losses (99.644), School (99.644), Family (91.8794)	Family (99.9235), Music (99.644), Children (82.76)
Sentiment Type	Positive (7%), Negative (35%), Neutral (58%)	Positive (22%), Negative (14%), Neutral (64%)
Sentiment Value	9	22.3
Comments	Opinion (77%), Fact (23%)	Opinion (78%), Fact (22%)

Table S9 Sentiment analysis of the worst experiences during lockdown across different genders. Sentiment analysis of the worst experiences faced by the respondents in India across different genders during the lockdown period.

	School	Bachelors	Masters	Doctorate
Top Contexts – Complex		spending time (98%, 19), family time (98%, 9), online courses (98%, 6), quality time (97%, 5), household chores (97%, 4), spending quality time (97%, 3), household work (96%, 3), story books (96%, 3), competitive coding (96%, 2), started doing (96%, 2), cooking etc (95%, 2), playing games (95%, 2), quality family time (95%, 2), culinary skills (95%, 2), online classes (94%, 2), posting videos (94%, 2), skill set (94%, 2), family members (94%, 2), household works (93%, 2), web series (93%, 2)	spending time (98%, 20), family time (98%, 12), quality time (97%, 7), online classes (97%, 5), online courses (96%, 4), family members (96%, 3), online teaching (96%, 2), pending work (95%, 2), spending quality (95%, 2), watching movies (95%, 2), household work (94%, 2), social media (94%, 2), data science (93%, 2), story books (93%, 2)	spending time (96%, 2), family time (95%, 2)
Top Contexts – Simple	family (100%, 4), cooking (94%, 4), books (89%, 3), movie (85%, 4), physics (81%, 1), etc (77%, 3), coding (74%, 2)	cooking (100%, 90), family (98%, 54), spending (97%, 26), skill (96%, 27), sleep (95%, 10), book (94%, 21), language (93%, 10), drawing (92%, 9), work (92%, 18), technology (91%, 4), movies (90%, 8), learning (89%, 7), household (88%, 14), reading (87%, 6), home (87%, 10)	cooking (100%, 63), family (98%, 50), spending (96%, 26), online (95%, 17), exercise (94%, 7), technology (92%, 4), movies (91%, 7), book (90%, 14), reading (89%, 6), work (88%, 13), quality (87%, 9), home (86%, 9), food (85%, 5), analysis (84%, 2), meditation (83%, 5)	cooking (100%, 13), family (96%, 9), books (93%, 6), spending (91%, 5), pollution (89%, 3), home (86%, 4), skills (85%, 3), management (83%, 2), research (81%, 2), introspection (79%, 2), hobby (77%, 4), meals (76%, 3), lockdown (74%, 3), started (73%, 3), practices (71%, 2)
Top Entities	Reading	AutoCAD		Reading
Top Topics	Family 91.1347 Literature 82.548 School 80.8121 Natural Science 70 Science (general) 70	Music 99.644 School 99.644 Design And Engineering 97.196 Family 92.9277	Parent And Child 99.9841 Music 99.644 Family 92.0747	Family 91.7083 Cinema 70 Literature 70 Pollution 70 Environmental Pollution 70 Virus Diseases 70 Hobby 70
Sentiment Type	Positive (34%), Negative (6%), Neutral (60%)	Positive (25%), Negative (15%), Neutral (60%)	Positive (23%), Negative (17%), Neutral (60%)	Positive 30(%), Negative (10%) , Neutral (60%)
Sentiment Value	98.7	4.5	35.2	-24.6
Comments	Opinion (77%), Fact (23%)	Opinion (77%), Fact (23%)	Opinion (70%), Fact (20%)	Opinion (79%), Fact (21%)

Table S10 Sentiment analysis of the best experiences during lockdown across different education levels. Sentiment analysis of the best experiences faced by the respondents in India across different education levels during the lockdown period.

	School	Bachelors	Masters	Doctorate
Top Contexts – Complex		lost job (97%, 5), meeting friends (97%, 4), physical activity (97%, 4), social media (96%, 3), college life (96%, 3), hostel life (96%, 3), internet connectivity (96%, 2), internet connection (95%, 2), passing time (95%, 2), lost interest (95%, 2), missing college (95%, 2), worst thing (94%, 2), lost college life (94%, 2), social distancing (94%, 2), mental pressure (94%, 2), feeling bore (93%, 2), loosing job (93%, 2), essential goods (93%, 2), fast food (92%, 2), household chores	lost job (97%, 6), worst thing (97%, 3), mental stress (96%, 2), health conditions (96%, 2), private practice (96%, 2), job opportunities (96%, 2), social life (95%, 2), migrant workers (95%, 2), project work (95%, 2), job loss (94%, 2), family members (94%, 2)	
Top Contextx – Simple		food (100%, 14), job (99%, 27), home (98%, 20), friends (97%, 22), college (96%, 20), boredom (95%, 11), work (95%, 17), physical (94%, 6), internet (93%, 6), family (92%, 8), fear (92%, 8), uncertainty (91%, 7), study (90%, 12), feeling (90%, 9), anxiety (89%, 7),	job (100%, 22), work (98%, 18), food (97%, 8), home (96%, 13), anxiety (95%, 9), family (94%, 9), fear (93%, 8), research (93%, 6), boredom (92%, 7), internship (91%, 6), loss (90%, 11), uncertainty (89%, 6), stress (88%, 5), friends (87%, 10), lack (87%, 10)	
Top Entities		King	Himalayas	
Top Topics		Parent And Child (99.9816), School (99.644), Recreational And Sporting Goods (95.9227), Television (89.3894)	Losses (99.644), School (99.644), Parent And Child (98.1166)	Productivity (70), Illness (70), Mental Illness (70), Psychology (70), Cycling (70)
Sentiment Type	Positive (%), Negative (%), Neutral (%)	Positive (7%), Negative (34%), Neutral (59%)	Positive (7%), Negative (35%), Neutral (59%)	Positive (%), Negative (%), Neutral (%)
Sentiment Value	-97.5	-45.5	36	69.4
Comments	Opinion (%), Fact (%)	Opinion (79%), Fact (21%)	Opinion (77%), Fact (23%)	Opinion (%), Fact (%)

Table S11 Sentiment analysis of the worst experiences during lockdown across different education levels. Sentiment analysis of the worst experiences faced by the respondents in India across different education levels during the lockdown period.

categories and visualized them in the form of word clouds of responses. The word clouds of different types experiences faced by people during the lockdown in India are shown in Fig. S10. These figures highlighted different types of experiences people had faced during COVID-19 pandemic.

The other novel findings highlighting critical reasons of panic among the people during COVID-19 pandemic are categorized hereunder.

Information Panic:

We found that many people (mostly aged) directly criticized the role of social media during this COVID-19 pandemic. Social media has indeed injected panic among some people through circulating fake news and this is true across the world.

"Social media helps but can also be catastrophic. Each person must find a balance." [Female, 51-60 years, Colombia]

"This pandemic has helped me develop zero trust level on social media" [Male, 51-60 years, USA]

"... Do not spread fake news. Wait until news channels or government websites confirm it." [Female, 21-30 years, India]

"And more importantly, we need to end the spread of fake news using Whatsapp or other social media." [Male, 21-30 years, India]

"... and ignore rumors" [Male, Above 60 years, USA]

Economic Panic:

We noticed that there are many economic challenges that the COVID-19 pandemic has caused, thereby increasing expectations from the government.

"I think a lot of people s [people] lost their daily earnings due to lock down, government should balance btw [between] more lockdown and more loss of life due to hunger." [Male, Above 60 years, India]

"... COVID-19 is atleast bringing out the truth about how much your employer cares, how much your government is prepared for a pandemic, how your fellow countrymen follows the government's instructions, etc. ..." [Male, 21-30 years, India]

"'government should provide more PPE and equipments to forefront warriors (doctors and staffs),and should take care of migrant workers." [Male, 21-30 years, India]

Moral Panic:

We noticed that the damages that people have made to the nature and other lives on earth are paying back in the form of panic. Many people are believing that their sufferings are caused by their activities. Interestingly, most of such people are younger. Their moral realization might have made them mentally weak. Such moral panic is a known behavior in psychology **??**.

"COVID-19 brings me more close to my inner-self n[and] nature." [Male, 31-40 years, India]

"Mother nature is a serial killer." [Male, 31-40 years, Bangladesh]

"Coronavirus should be a wake-up call to our treatment of the animal world." [Male, 21-30 years, India]

"The population of the world is increasing day by day and it is becoming a dangerous problem. Though COVID-19 is causing so much death, I personally think that the world needed that save herself." [Female, 21-30 years, India]

Figure S10. Word cloud of the experiences during lockdown in India. Cloud of responses highlighting the experiences people have faced during the lockdown (or other types of containment in some countries). A bigger word in the cloud denotes a higher frequency response. Word cloud with the (A) best experiences shared by the respondents, (A) worst experiences shared by the respondents, and (C) suggestions for dealing with lockdown in a better way.

"It's good this virus came because of which pollution level has decrease drastically and we all people can see the difference and river also get clean this is nature." [Male, Below 21 year, India]

"Lets take it as a lesson that Mother Nature is the boss and not the humans." [Male, 21-30 years, India]

Spiritual Panic:

We noticed that the thoughts about COVID-19 of some people (mostly aged) are spiritually affected. Hence, the panic might also get influenced by such beliefs.

"It's a God sent disease" [Male, 51-60 years, India]

"God bless us" [Male, 51-60 years, India]

"Tpray [Pray] to God ro [to] get the vaccine at the earliest" [Female, 41-50 years, India]

Mental Health:

We observed that the younger people are well aware of the recent reports about mental health related to COVID-19. They might get more panicked with such reports already in hand.

"Data recently published by Fitbit shows that Indians are the least active and second-most sleep deprived. How we behave as a community during crisis often comes down to the lifestyle we have as individuals, which, in my opinion, is quite poor. Our mental health awareness is quite appalling and many of us lack basic emotional education." [Male, 21-30 years, India]

Alternative Medicine:

We found that some people (mostly aged) have faith is alternative medicine. Therefore, the discovery of a vaccine or drug might not reduce their anxiety and release there panic.

"... research needed on other form of medicine e. g Ayurveda, homeopathy, Unani"[Male, 51-60 years, India]